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DOE 5700.6C (The Order)
combined with
10 CFR 830.120 (The Rule)
Requirements
For Comparison
(The requirements of the Rule are in bold)

DOE Order 5700.6C, section 9. REQUIREMENTS.

a. General.

- (1) {DOE Order requirement a1} Senior management shall be responsible for Quality Assurance Program (QAP) implementation, assessment, and improvement.
{DOE Order requirement a2} Departmental Elements and M&O contractors shall develop their QAPs by applying the quality assurance criteria specified in subparagraph 9b.
{DOE Order requirement a3} The quality assurance program shall include a discussion of how the criteria will be satisfied taking into consideration the risk associated with the work.
{DOE Order requirement a4} Appropriate standards shall be used, wherever applicable, to develop and implement QAPs.
- (2) Guidance for developing and implementing QAPs is provided in Attachment I. This guidance may not be appropriate in its entirety for application to every type of work. Additional Implementation Guides, such as for research and development work, will be developed, and after approval, be incorporated into the provisions of this Order.
- (3) {DOE Order requirement a5} Contractors shall obtain DOE approval of new QAPs prior to commencing work.
{DOE Order requirement a6} Contractors working to existing quality assurance programs shall ensure that their QAPs meet the requirements of this Order and shall re-submit their QAPs, together with an implementation plan, to the Lead Program Secretarial Officers (PSOs) for approval within 180 days after this Order becomes effective.
{DOE Order requirement a7} Quality assurance programs shall be regarded as approved by DOE 180 days after submittal, including any modifications which have been made or directed by DOE during this period, or receipt of a letter, whichever occurs first.
- (4) DOE contractors may, at any time, make changes to their DOE- approved QAPs.
{DOE Order requirement a8} Changes made over the previous year to DOE- approved QAPs shall be submitted annually to the Lead PSO for review.
{DOE Order requirement a9} All changes shall be regarded as approved by DOE 90 days after submittal, including any modifications which have been made or directed by DOE during this period, or receipt of a letter, whichever occurs first.
{DOE Order requirement a10} The submittals shall identify the changes, the pages affected, the reason for the changes, and the basis for concluding that the revised program

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continue ,to satisfy the requirements of this Order. Changes made to correct spelling, punctuation, or other editorial items do not require explanation.

(5) { DOE Order requirement a11 } Assessments of the DOE and contractor work shall be conducted based on DOE-approved quality assurance program.

(6) { DOE Order requirement a12 } Programs, guides, and policies which implement this Order shall meet the requirements of DOE 1324.2A. (The Records and Reports Branch, AD-241.1, is available for any needed assistance regarding records ,management.)

10 CFR 830.120; QUALITY ASSURANCE REQUIREMENTS.

§ 830.4 General rule

(a) No person shall take or cause to be taken any action inconsistent with the requirements of this Part or any program, plan, schedule, or other process established by this Part { This requirement is specific to The Rule }.

(b) With respect to a particular DOE nuclear facility, the contractor responsible for the design, construction, operation, or decommissioning of that facility shall be responsible for implementation of, and compliance with, the requirements of this Part { This requirement is specific to The Rule }.

(c) When a section of this part expressly requires a plan, program, or implementation plan, the provisions of any such plan, program, or implementation plan, as approved by DOE, shall be the basis used to determine compliance with the relevant nuclear safety requirements in the section { This requirement is specific to The Rule }.

§ 830.5 Enforcement.

The requirements in this Part are DOE Nuclear Safety Requirements and are subject to enforcement by all appropriate means, including the imposition of civil and criminal penalties in accordance with the provisions of Part 820 of this title.

§ 830.6 Records - { DOE Order requirement a12 may apply }.

A person shall maintain complete and accurate records as necessary to substantiate its compliance with the requirements of this Part.

§ 830.7 Graded approach. - { DOE Order requirement a3 }.

(a) Where indicated in a subpart, a graded approach shall be utilized to comply with the requirements.

(b) Whenever a graded approach is applied in meeting a DOE nuclear safety requirement, the bases for selecting an action pursuant to the graded approach shall be documented.

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§ 830.120 Quality assurance requirements.

(a) *General Rule.* (1) A contractor responsible for a DOE nuclear facility shall - {DOE Order requirement a1}:

(i) Conduct its work in accordance with the criteria of paragraph (c) of this section - {DOE Order requirement a2, and a 11}

(ii) Develop and submit for approval by DOE a Quality Assurance Program (QAP) for the work - {DOE Order requirement a5}, and

(iii) Implement the QAP, as approved and modified by DOE.

(b) *Quality Assurance Program*

[1] A contractor shall develop a QAP by applying the quality assurance criteria specified in paragraph (c) of this section. The criteria of paragraph (c) of this section shall be applied using a graded approach - {DOE Order requirement a3}. The contractor shall use appropriate standards, whenever applicable, to develop and implement its QAP - {DOE Order requirement a4}.

[2] Within 180 days after May 5, 1994, a contractor shall submit to DOE for approval a current QAP and an implementation plan.

[3] A contractor may, at any time, make changes to an approved QAP - {DOE Order requirement a8}. Changes made over the previous year shall be submitted annually to DOE for review. A submittal shall identify the changes, the pages affected, the reason for the changes, and the basis for concluding that the revised QAP continues to satisfy the requirements of this section - {DOE Order requirement a10}. Changes made to correct spelling, punctuation, or other editorial items do not require explanation.

(4) Implementation plans and QAPs shall be regarded as approved by DOE 90 days after submittal, unless approved or rejected by DOE at an earlier date, and shall include any modification made or directed by DOE - {DOE Order requirement a6, a7, and a9}.

b. Quality Assurance Criteria.

(1) Management.

CRITERION ONE

(a) DOE Order 5700.6C, Criterion 1--program. Organizations shall develop, implement, and maintain a written Quality Assurance Program. The QAP shall describe the organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing adequacy of work. The QAP shall describe the management system, including planning, scheduling, and cost control considerations.

(i) *10 CFR 830.120 Quality Assurance Criteria: Program.* A written QAP shall be developed, implemented, and maintained. The QAP shall describe the organizational structure, functional responsibilities, levels of authority, and interfaces for those

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managing, performing, and assessing the work. The QAP shall describe the management processes, including planning, scheduling, and resource considerations.

10CFR830.120 & DOE ORDER 5700.6C **CRITERION ONE** are essentially the same, however, for The Order criteria 1 applies to the organization, and for The Rule criteria 1 applies to the facility. This may seem to be a moot point, but while the facility cannot change physical locations, the organization can.

CRITERION TWO

(b) DOE Order 5700.6C, Criterion 2--Personnel Training and Qualification. Personnel shall be trained and qualified to ensure they are capable of performing their assigned work. Personnel shall be provided continuing training to ensure that job proficiency is maintained.

(ii) ***10 CFR 830.120 Quality Assurance Criteria: Personnel Training and Qualification.*** Personnel shall be trained and qualified to ensure they are capable of performing their assigned work. Personnel shall be provided continuing training to ensure that job proficiency is maintained.

10CFR830.120 & DOE ORDER 5700.6C **CRITERION TWO** ARE IDENTICAL.

CRITERION THREE

(c) DOE Order 5700.6C, Criterion 3--Quality Improvement. The organization shall establish and implement processes to detect and prevent quality problems and to ensure quality improvement. Items and processes that do not meet established requirements shall be identified, controlled, and corrected. Correction shall include identifying the causes of problems and preventing recurrence. Item reliability, process implementation, and other quality-related information shall be reviewed and the data analyzed to identify items and processes needing improvement.

(iii) ***10 CFR 830.120 Quality Assurance Criteria: Quality Improvement.*** Processes to detect and prevent quality problems shall be established and implemented. Items, services, and processes that do not meet established requirements shall be identified, controlled, and corrected according to the importance of the problem and the work affected. Correction shall include identifying the causes of problems and working to prevent recurrence. Item characteristics, process implementation, and other quality-related information shall be reviewed and the data analyzed to identify items and processes needing improvement.

10CFR830.120 & DOE ORDER 5700.6C **CRITERION THREE** ARE ESSENTIALLY IDENTICAL.

CRITERION FOUR

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(d) DOE Order 5700.6C, Criterion 4--Documents and Records. Documents shall be prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design. Records shall be specified, prepared, reviewed, approved, and maintained.

(iv) ***10 CFR 830.120 Quality Assurance Criteria: Documents and Records.*** Documents shall be prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design. Records shall be specified, prepared, reviewed, approved, and maintained.

10CFR830.120 & DOE ORDER 5700.6C CRITERION FOUR ARE IDENTICAL.
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(2) Performance.

CRITERION FIVE

(a) DOE Order 5700.6C, Criterion 5--Work Processes. Work shall be performed to established technical standards and administrative controls. Work shall be performed under controlled conditions using approved instructions, procedures, or other appropriate means. Items shall be identified and controlled to ensure their proper use. Items shall be maintained to prevent their damage, loss, or deterioration. Equipment used for process monitoring or data collection shall be calibrated and maintained.

(i) ***10 CFR 830.120 Quality Assurance Criteria: Work Processes.*** Work shall be performed to established technical standards and administrative controls using approved instructions, procedures, or other appropriate means. Items shall be identified and controlled to ensure their proper use. Items shall be identified and controlled to ensure their proper use. Items shall be maintained to prevent their damage, loss, or deterioration. Equipment used for process monitoring or data collection shall be calibrated and maintained.

10CFR830.120 & DOE ORDER 5700.6C CRITERION FIVE ARE ESSENTIALLY IDENTICAL.
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CRITERION SIX

(b) DOE Order 5700.6C, Criterion 6--Design. Items and processes shall be designed using sound engineering/scientific principles and appropriate standards. Design work, including changes, shall incorporate applicable requirements and design bases. Design interfaces shall be identified and controlled. The adequacy of design products shall be verified or validated by individuals or groups other than those who performed the work. Verification and validation work shall be completed before approval and implementation of the design.

(ii) ***10 CFR 830.120 Quality Assurance Criteria: Design.*** Items and processes shall be designed using sound engineering/scientific principles and appropriate standards. Design work, including changes, shall incorporate applicable requirements and design

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bases. Design interfaces shall be identified and controlled. The adequacy of design products shall be verified or validated by individuals or groups other than those who performed the work. Verification and validation work shall be completed before approval and implementation of the design.

10CFR830.120 & DOE ORDER 5700.6C **CRITERION SIX** ARE IDENTICAL.

CRITERION SEVEN

(c) DOE Order 5700.6C, Criterion 7--Procurement. The organization shall ensure that procured items and services meet established requirements and perform as specified. Prospective suppliers shall be evaluated and selected on the basis of specified criteria. The organization shall verify that approved suppliers can continue to provide acceptable items and services.

(iii) ***10 CFR 830.120 Quality Assurance Criteria: Procurement.*** The organization shall ensure that procured items and services meet established requirements and perform as specified. Prospective suppliers shall be evaluated and selected on the basis of specified criteria. Processes to ensure that approved suppliers continue to provide acceptable items and services shall be established and implemented.

10CFR830.120 & DOE ORDER 5700.6C **CRITERION SEVEN** ARE ESSENTIALLY IDENTICAL.

CRITERION EIGHT

(d) DOE Order 5700.6C, Criterion 8--Inspection and Acceptance Testing. Inspection and acceptance testing of specified items and processes shall be conducted using established acceptance and performance criteria. Equipment used for inspections and tests shall be calibrated and maintained.

(iv) ***Inspection and Acceptance Testing.*** Inspection and testing of specified items, services, and processes shall be conducted using established acceptance and performance criteria. Equipment used for inspections and tests shall be calibrated and maintained.

10CFR830.120 & DOE ORDER 5700.6C **CRITERION EIGHT** ARE ESSENTIALLY IDENTICAL.

(3) Assessment.

CRITERION NINE

(a) DOE Order 5700.6C, Criterion 9--Management Assessment. Management at all levels shall periodically assess the integrated quality assurance program and its performance. Problems that hinder the organization from achieving its objectives shall be identified and corrected.

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- (i) ***10 CFR 830.120 Quality Assurance Criteria: Management Assessment.*** Management shall assess their management processes. Problems that hinder the organization from achieving its objectives shall be identified and corrected.

The essential difference between 10CFR830.120 & DOE ORDER 5700.6C **CRITERION NINE** is that in The Order what is to be assessed is the quality program. While in The Rule what is assessed is the management processes. This probably means the administrative processes. This goes beyond the traditional scope of assessing the essential parts of a quality program.

CRITERION TEN

- (b) DOE Order 5700.6C, Criterion 10 - Independent Assessment. Planned and periodic independent assessments shall be conducted to measure item quality and process effectiveness and to promote improvement. The organization performing independent assessments shall have sufficient authority and freedom from the line organization to carry out its responsibilities. Persons conducting independent assessments shall be technically qualified and knowledgeable in the areas assessed.

- (ii) ***10 CFR 830.120 Quality Assurance Criteria: Independent Assessment.*** Independent assessments shall be planned and conducted to measure item and service quality, to measure the adequacy of work performance, and to promote improvement. The group performing independent assessments shall have sufficient authority and freedom from the line to carry out its responsibilities. Persons conducting independent assessments shall be technically qualified and knowledgeable in the areas assessed.

10CFR830.120 & DOE ORDER 5700.6C **CRITERION TEN** ARE ESSENTIALLY IDENTICAL.